

Features

- Frequency: 9~11GHz
- Gain: 23dB
- OP_{-3dB}: 42dBm
- Supply Voltage: +13.5~+15V
- Built-in DC/DC converter

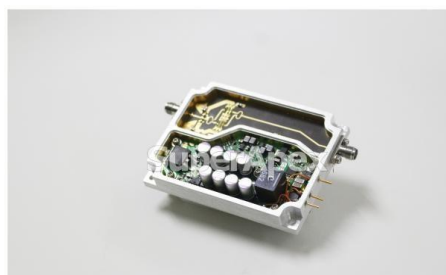
Typical Applications

- Microwave radio
- Telecommunication
- Test instrumentation

General Description

SAC1125 is a power amplifier module with a typical small signal gain of 23dB and a nominal OP_{-3dB} of +42dBm across the frequency range of 9 to 11GHz.

Image



Electrical Performance

T_A=25°C, V_D=13.5V, Z₀=50Ω

Parameter	Min.	Typ.	Max.	Units
Frequency Range	9~11			GHz
Small Signal Gain	20	23	27	dB
Noise Figure	—	5.5	—	dB
Output Power for 3 dB Compression (OP _{-3dB})	42	—	—	dBm
Input VSWR	—	1.5	2.2	:1
Output VSWR	—	1.7	2.2	:1
Reverse Isolation	—	-55	—	dB
Supply Voltage	13.5	—	15	V
Supply Current	—	—	5.5	A
Max Input Power	—	—	26	dBm
Non-Harmonics Spurious	—	62	—	dBc
Harmonics*	—	18	—	dBc

*At P_{out}=42dBm

**Load Standing Wave Ratios in excess of 2:1 may cause device damage

Mechanical Specifications

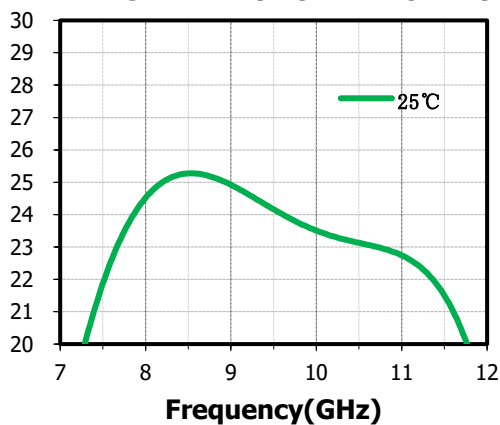
Parameter	
Input/Output	SMA-F/SMA-F
Bias	Pin
Case Material	Aluminum alloy
Weight	145g
Cooling	External Heatsink, forced air required

SuperApex, LLC

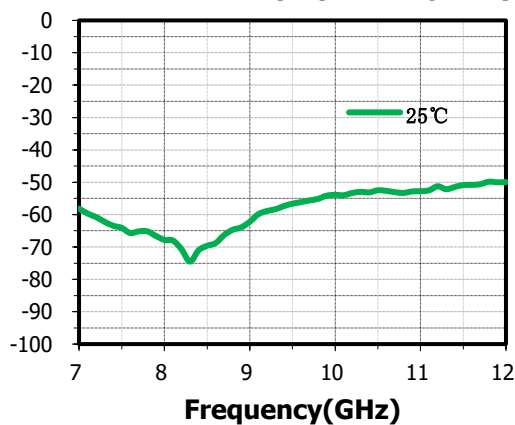
1580 S. Milwaukee Ave. Suite 405, Libertyville, IL 60048, USA
 Tel: 1-847-505-8319, 1-847-573-9866
 E-mail: sales@superapexco.com
 Website: www.superapexco.com

Typical Performance Curve

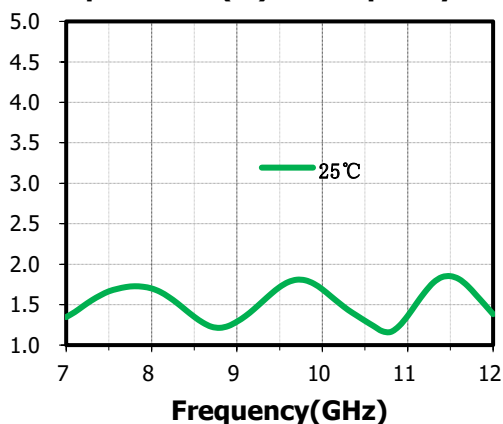
Small Signal Gain(dB) vs.Frequency



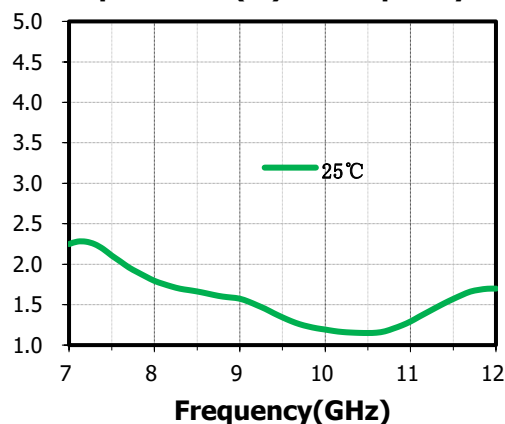
Reverse Isolation(dB) vs.Frequency



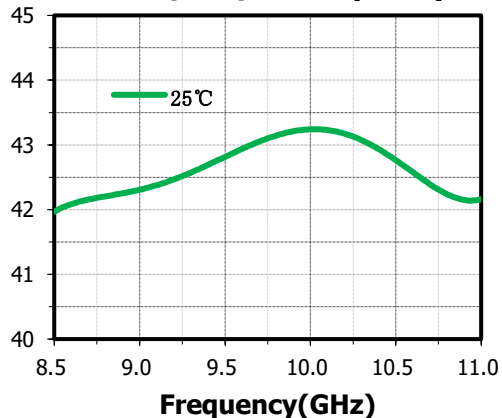
Input VSWR(:1) vs.Frequency



Output VSWR(:1) vs.Frequency

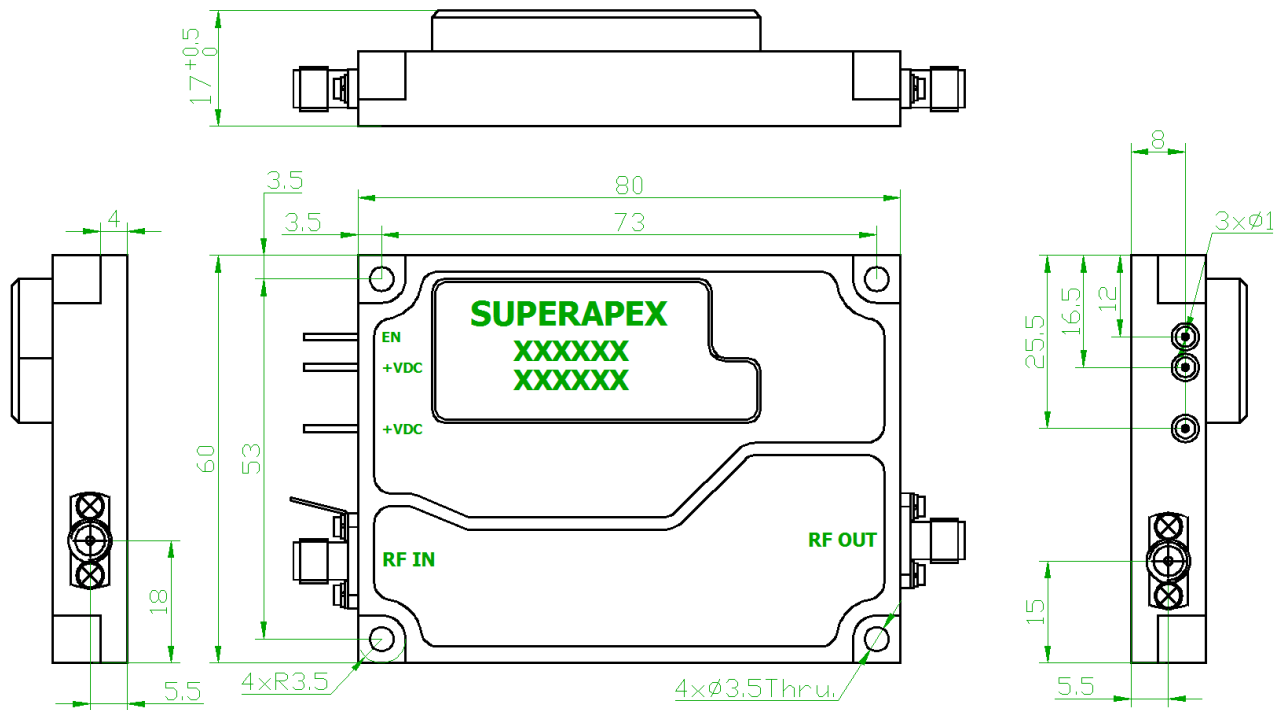


OP-3dB(dBm) vs.Frequency



Mechanical Outline

All dimensions are in millimeters



Note:

1. Two RF Connectors are field-replaceable.
2. Turn-on: Apply +VDC, Apply EN(0-0.3V→OFF/4-5V→ON), Apply RFIN signal.
3. Turn-off: Remove RFIN signal, Remove EN, Remove +VDC.